

## ABSTRACT

1       A dual mode amplifier having single ended and differential ended modes of  
2   operation using only one set of output pads or terminals. The dual mode amplifier has  
3   two differential amplifiers, connected by coupling circuitry, each differential amplifier  
4   receiving a pair of differential input signals and having one output terminal. By  
5   activating and deactivating the coupling circuitry, the differential amplifiers can operate  
6   in two modes using the one set of output terminals. In the singled ended mode, the  
7   differential amplifiers operate independently, each converting the differential input  
8   signals to a singled ended output signal at their respective output terminals. In the  
9   differential mode, the differential amplifiers operate together to provide a pair of  
10   differential output signals at the output terminals based upon the pair of input signals.